

Esophageal duplication cyst: A rare cause of back pain

Özofagus duplikasyon kisti: Ender rastlanan bir sırt ağrısı nedeni

To the Editor,

A 36-year-old woman who presented with back pain had an unremarkable history except for an episode of gastric bleeding approximately one year before. The physical examination revealed decreased breath sounds on the right basal side. Computed tomography showed a paraspinal dumbbell-shaped cystic mass in the right posterior mediastinum, measuring 8 cm, with septation and a thick wall and extending from the thoracic inlet to the diaphragm (Figure 1). The patient underwent an exploratory thoracotomy, during which the outer surface of the lesion was found to be attached to the esophageal wall, without any connection with the esophageal lumen. Partial excision of the cyst wall was performed. The excised part of the cyst measured 5.5x0.8 cm. Microscopically, it was consistent with esophageal cyst, which included double-layered muscularis propria.

Benign esophageal cysts encountered within the gastrointestinal duplication cysts (GDCs) are rare embryonic malformations. The incidence of GDCs, which are mostly diagnosed in early childhood, is 1:100,000, with only about 160 cases described in adults (1). The frequent localizations are the ileum (50%) and esophagus (25%).

The primitive foregut gives rise to several bronchopulmonary foregut malformations, which cause cystic mass lesions in the chest cavity. The two most common types are bronchogenic-type cyst and esophageal duplication cyst (EDC), which are localized around the tracheobronchial tree and right posterior inferior mediastinum, respectively. Although many of the EDCs are set in the wall of the lower half of the esophagus, they can also be seen as separate masses with or without communication with the esophageal lumen. Foregut cysts are lined by a ciliated epithelium, which lines both the early tracheobronchial tree and esophagus. Thus, from a pathology point of view, mediastinal

cysts can be classified as esophageal duplications if they contain two muscle layers close to the esophageal wall.

In early childhood, 80% of the EDCs cause respiratory distress or nutritional difficulty due to mass effect (1,2). In adults, although these cysts are usually asymptomatic, they can cause dysphagia or back pain or be complicated by intracystic hemorrhage, rupture, pulmonary or esophageal hemorrhage, and infection (1,3). Malignant transformation has also been reported (1,4).

Differential diagnosis of a posterior mediastinal cyst includes degenerated neurogenic tumor, other GDCs and cystic lymphangioma (5). Making a definite diagnosis is difficult even with radiological methods; therefore, transthoracic excision is crucial for a definitive diagnosis by histopathologic examination and for prevention of complications.



Figure 1. CT of chest showing a right paraspinal cystic mass in the posterior mediastinum.

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REFERENCES

1. Ringley C, Bochkarev V, Oleynikov D. Esophageal duplication cyst--a guest case in robotic and computer-assisted surgery from the University of Nebraska Medical Center. *MedGenMed* 2006; 8: 25.
2. Dujon A, Carnot F, Riquet M, Debesse B. 6 para-esophageal cysts. Discussion on their origins. *Ann Radiol (Paris)* 1991; 34: 261-6.
3. Neumann J, Atkins DJ, Zirngibl H. Esophageal cyst--a rare cause of backache. *Zentralbl Chir* 1998; 123: 1175-9.
4. Lee MY, Jensen E, Kwak S, Larson RA. Metastatic adenocarcinoma arising in a congenital foregut cyst of the esophagus: a case report with review of the literature. *Am J Clin Oncol* 1998; 21: 64-6.
5. Singh K, Naik R. Esophageal cyst--a case report. *Indian J Pathol Microbiol* 2006; 49: 396-7.

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Femoral muscle metastasis from gastric carcinoma

Mide kanserinin femoral kasa metastazı

To the Editor,

The incidence of skeletal metastasis from gastric cancer ranges from 0.8-17.5% (1,2). We report a patient with intramuscular metastasis to his left thigh diagnosed 24 months after gastrectomy for a T3N1 adenocarcinoma of the stomach. Magnetic resonance imaging (MRI) revealed a soft tissue mass in the upper third of his left thigh, for which he was operated twice and complete resection was achieved. The biopsy showed metastasis from the gastric adenocarcinoma. Subsequently, the patient underwent irradiation. The patient lived for 30 months after the completion of radiation therapy for the metastasis, and his overall survival was 47 months. In this report, the metastatic pattern of gastric carcinoma was unusual, as it was not developed in the liver and lung but in skeletal muscles.

Radiographic evaluation of the mass often provides valid information on intramuscular metastatic tumors. In MRI, metastatic lesions are usually of low signal intensity on T1-weighted images and high signal intensity on T2-weighted images (3,4). In this case, sagittal T2-weighted images depicted the involved muscles of the left thigh with long T2 values and diffuse swelling. Axial T2-weighted

images were useful for separation of the involved from the uninvolved muscles (Figure 1).



Figure 1. T2-weighted coronal image with fat saturation. The mass is well defined and shows a heterogeneous signal intensity. Peritumoral enhancement is characteristic. Edema of the surrounding tissues is seen.

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